

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A liquid injection apparatus comprising:
 - a liquid container having a memory element which stores information about retained liquid;
 - a carriage mounting said liquid container and having a liquid injection head which injects said liquid;
 - a moving mechanism which moves said carriage;
 - ~~a replacement liquid container for replacing the liquid container mounted on said carriage, the replacement liquid container having a memory element which stores information about retained liquid;~~
 - an acquisition device that acquires the information stored in said memory element of the replacement liquid container mounted on the carriage and information stored in a memory element which is provided in a replacement liquid container replaceable with the liquid container mounted on the carriage and stores information about retained liquid, wherein a first communication section is connected to each memory element, and wherein the acquisition device has a second communication section communicatable with each first communication section in a non-contact manner for acquiring the information stored in each memory element;
 - a determining section which determines whether or not to replace said liquid container mounted on said carriage with said replacement liquid container, based on the information acquired by said acquisition device; and

a control section which controls said moving mechanism in such a way as to move said carriage to a replacement position from a standby position in the case where said determining section has determined that replacement with said replacement liquid container should be performed.

2. (currently amended): The liquid injection apparatus according to claim 1, wherein a color and remaining amount of liquid retained in the corresponding liquid container are stored as said information in each said memory element, and

~~said acquisition device acquires the information stored in said memory element of the liquid container mounted on said carriage, and~~

said determining section determines that the liquid container should be replaced with said replacement liquid container in the case where the remaining amount of the liquid in the replacement liquid container is larger than a remaining amount of the liquid in the liquid container which is mounted on said carriage and retains a liquid of the same color as that of the liquid in said replacement liquid container.

3. (previously presented): The liquid injection apparatus according to claim 1, wherein a plurality of liquid containers are mounted on said carriage, and after one of said liquid containers mounted on said carriage has been replaced with said replacement liquid container, when said acquisition device further acquires information from a memory element provided in another replacement liquid container while the carriage is at the replacement position, said control section controls said moving mechanism to replace with said another replacement liquid

container one of the liquid containers on the carriage that retains a liquid of the same color as the liquid in said another replacement liquid container.

4. (previously presented): The liquid injection apparatus according to claim 1, wherein in the case where said acquisition device has not acquired information from a memory element provided in another replacement liquid container after a predetermined time has passed since replacement of the liquid container on said carriage with said replacement liquid container at said replacement position, said control section controls said moving mechanism in such a way as to move said carriage at said replacement position to said standby position.

5. (previously presented): The liquid injection apparatus according to claim 1, further comprising operation portion which is operated to drive said moving mechanism arbitrarily to move said carriage to said replacement position and said standby position regardless of a determination by said determining section.

6. (previously presented): The liquid injection apparatus according to claim 1, further comprising display control section for displaying on a display device information stored in the memory element in said replacement liquid container, acquired by said acquisition device.

7. (currently amended): ~~A~~The liquid injection apparatus according to claim 1, further comprising:

~~a liquid container having a memory element which stores information about retained liquid;~~

~~a carriage mounting said liquid container in a detachable manner and having a liquid injection head which injects the liquid;~~

~~a moving mechanism which moves said carriage;~~

a housing having a cover portion which covers both said liquid container and said carriage in such a way as to make said liquid container irreplaceable at a predetermined position in a moving area of said carriage;

~~a first communication section connected to said memory element; and~~

~~an information acquisition device having a second communication section communicatable in a non-contact manner,~~

wherein the ~~information~~ acquisition device is provided at a portion of said cover portion that faces said first communication section.

8. (previously presented): The liquid injection apparatus according to claim 7, wherein said liquid container has a bottom, a top opposite to said bottom, and sides extending between said bottom and said top, a liquid supply port is provided in said bottom for supplying a liquid to said liquid injection head, and said first communication section is provided on said top.

9. (previously presented): The liquid injection apparatus according to claim 7, wherein a plurality of liquid containers are mounted on said carriage in a detachable manner, and at least

the liquid container that is at a position communicatable with said second communication section is covered with said cover portion.

10. (previously presented): The liquid injection apparatus according to claim 7, wherein the moving mechanism moves said carriage through a movement area that includes a first zone set for injecting a liquid toward a predetermined target and a remaining second zone, and said cover portion is provided in association with said second zone.

11. (currently amended): A control method for a liquid injection apparatus which performs liquid injection while moving a carriage on which a liquid container is mounted, the liquid container having a memory element which stores information about retained liquid, and the carriage having a liquid injection head which injects said liquid, the method comprising:

acquiring the information stored in said memory element of the liquid container mounted on said carriage and information about a liquid, stored in a memory element equipped on a replacement liquid container replaceable with the liquid container mounted on said carriage,
wherein a first communication section is connected to each memory element;

causing a second communication section to communicate with each first communication section in a non-contact manner for acquiring the information stored in each memory element;

determining whether or not to replace said liquid container mounted on said carriage with said replacement liquid container, based on the information about the liquid in said liquid container mounted on the carriage and the information about the liquid in said replacement liquid container; and

moving said carriage to a replacement position in the case where the liquid container mounted on said carriage is determined to be replaced with said replacement liquid container.

12. (currently amended): The method for a liquid injection apparatus according to claim 11, ~~further comprising acquiring the information stored in said memory element of the liquid container mounted on said carriage, wherein:~~

a color and remaining amount of liquid retained in the corresponding liquid container are stored as said information in each said memory element, and

the liquid container is determined to be replaced with said replacement liquid container in the case where the remaining amount of the liquid in the replacement liquid container is larger than a remaining amount of the liquid in the liquid container which is mounted on said carriage and retains a liquid of the same color as that of the liquid in said replacement liquid container.

13. (previously presented): The method for a liquid injection apparatus according to claim 11, further comprising displaying on a display device the acquired information about the liquid in said replacement liquid container.

14. (currently amended): A control program for a computer of a liquid injection apparatus which performs liquid injection while moving a carriage on which a liquid container is mounted, the liquid container having a memory element which stores information about retained liquid, and the carriage having a liquid injection head which injects said liquid, wherein the control program causes the computer to perform steps comprising:

acquiring the information stored in said memory element of the liquid container mounted on said carriage and information about a liquid, stored in a memory element equipped on a replacement liquid container replaceable with the liquid container mounted on said carriage, wherein a first communication section is connected to each memory element;

causing a second communication section to communicate with each first communication section in a non-contact manner for acquiring the information stored in each memory element;

determining whether or not to replace said liquid container mounted on said carriage with said replacement liquid container, based on the information about the liquid in said liquid container mounted on the carriage and the information about a liquid in said replacement liquid container; and

moving said carriage to a replacement position in the case where the liquid container mounted on said carriage is determined to be replaced with said replacement liquid container.

15. (currently amended): The control program according to claim 14, ~~further comprising the step of acquiring the information stored in said memory element of the liquid container mounted on said carriage, wherein:~~

a color and remaining amount of liquid retained in the corresponding liquid container are stored as said information in each said memory element, and

the liquid container is determined to be replaced with said replacement liquid container in the case where a remaining amount of the liquid in the replacement liquid container is larger than the remaining amount of the liquid in the liquid container which is mounted on said carriage and retains a liquid of the same color as that of the liquid in said replacement liquid container.

16. (previously presented): The control program according to claim 14, further comprising the step of displaying on a display device the acquired information about the liquid in said replacement liquid container.

17. (new): A liquid injection apparatus comprising:

- a liquid container having a memory element which stores information about retained liquid;
- a carriage mounting said liquid container and having a liquid injection head which injects said liquid;
- a moving mechanism which moves said carriage;
- an acquisition device that acquires the information stored in said memory element of the liquid container mounted on the carriage and information stored in a memory element which is provided in a replacement liquid container replaceable with the liquid container mounted on the carriage and stores information about retained liquid;
- a determining section which determines whether or not to replace said liquid container mounted on said carriage with said replacement liquid container, based on the information acquired by said acquisition device;
- an operation portion which is operated to move said carriage to a replacement position from a standby position; and
- a control section which controls said moving mechanism to move said carriage to the replacement position from the standby position regardless of an operation of the operation

portion when said determining section has determined that replacement with said replacement liquid container should be performed and to move said carriage to the replacement position from the standby position regardless of a determination by said determination section when the operation portion is operated.